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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,417

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Hiromitsu Takeda

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EXAMINER

JOY, DAVID J

ART UNIT

PAPER NUMBER

1785

MAIL DATE

DELIVERY MODE

06/21/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/524,417	<b>Applicant(s)</b> TAKEDA ET AL.	
	<b>Examiner</b> David J. Joy	<b>Art Unit</b> 1785	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 March 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,6 and 8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-3, 6 and 8 are pending as amended on March 23, 2010, with Claims 4 and 5 having been cancelled. Claim 7 was previously cancelled.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Response to Amendment***

3. Applicant's cancellation of Claims 4 and 5, in the amendment filed on March 23, 2010, renders the previously cited rejections under 35 U.S.C. §§ 112 and 103 moot.
  - a. The rejection of Claims 4 and 5 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement, has been withdrawn.
  - b. The rejection of Claims 4 and 5 under 35 U.S.C. §103(a), as being unpatentable over the U.S. Patent of Lin (5,275,869) in view of the U.S. Patent Application Publication of Miyabashi (2001/0009933), has been withdrawn.

4. Applicant's amendments to claims, in the amendment filed on March 23, 2010, and the remarks that accompanied the amendment, obviate the previously cited rejections under 35 U.S.C. §§ 112 and 103.

a. The rejection of Claims 1-3, 6 and 8 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement, has been withdrawn.

b. The rejection of Claims 1-3, 6 and 8 under 35 U.S.C. §103(a), as being unpatentable over Lin in view of the Miyabashi, has been withdrawn.

***Claim Rejections - 35 USC § 112***

5. Claims 1-3, 6 and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. In Claim 1, the amendment includes the limitation "an aluminum thin film without any crevices" in both the fourth-to-last and second-to-last line of the claim. Applicant asserts that support for the newly-added limitation is disclosed at Page 22, Lines 15-18, of the present specification. However, the cited portion of the specification fails to provide the requisite support for the limitation,

and Examiner could not find the proper support anywhere in the specification. In addition, the amendment to Claim 1 also recites that "the heat ray reflection substrate comprises: a semitransparent polyethylene terephthalate film having a surface which is uniformly vacuum-deposited with an aluminum thin film without any crevices; or a composite ...". In the specification, at Page 22, Lines 13-22, it is recited that "[as] the substrate, an Al vacuum-deposited semitransparent PET film ... was used, where the visible light absorbing ink was coated on one side or both sides of the PET film *and also this was stuck to a 3 mm thick transparent float glass sheet* to make optical measurement" (emphasis added). Likewise, Comparative Example 1 recites the same composite structure for the substrate. In addition, Example 1 states that "[as] a substrate therefore, the above Al vacuum-deposited semitransparent PET film given as Comparative Example was used" and all of the subsequent inventive examples state that "a sample was prepared in the same manner as in Example 1." As a result, the present specification only provides support for the substrate being the composite laminate that includes a glass plate recited by Claim 1, and not the heat ray reflection substrate that comprises a PET film having a surface which is vacuum-deposited with an aluminum thin film.

6. Claims 2, 3, 6 and 8 are rejected accordingly, as they all depend upon Claim 1.

7. Claims 1-3, 6 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is indefinite due to the fact that the claim recites that the vacuum-deposited aluminum thin film is *without any crevices*. The claim is unclear as to what exactly a "crevice" is meant to convey. Does "without any crevices" require that the thin film fully coat the entire surface from edge-to-edge, or does it mean that the thin film must not be irregularly-shaped or rough or have any surface variations whatsoever?

8. Claims 2, 3, 6 and 8 are rejected accordingly, as they all depend upon Claim 1.

***Potentially Allowable Subject Matter***

9. Claims 1-3, 6 and 8 would be allowable if rewritten or amended (if possible) to overcome the rejections under 35 U.S.C. §112, first and second paragraph, set forth *supra*.

10. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach or suggest a laminate consisting of a heat-

ray reflection substrate and a visible light absorbing film formed by a visible light absorbing ink having been coated on one side or both sides of the substrate, wherein the ink contains at least one fine particles of a compound oxide selected from the group consisting of Cu-Fe-Mn, Cu-Cr, Cu-Cr-Mn, Cu-Cr-Mn-Ni, Cu-Cr-Fe, Co-Cr-Fe, titanium nitride and titanium oxynitride and the fine particles have an average dispersed-particle diameter of 300 nm or less in the ink, and the heat ray reflection substrate comprises a composite comprising a semitransparent polyethylene terephthalate film having a surface which is uniformly vacuum-deposited with an aluminum thin film without any crevices and a glass plate. The U.S. Patent of Lin is now the closest prior art to that which is presently claimed.

### *Response to Arguments*

11. Applicant's arguments with respect to Claims 1-6 and 8 have been considered but are moot in view of the new grounds of rejection.

### *Conclusion*

12. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

13. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Joy whose telephone number is (571) 272-9056. The examiner can normally be reached on Monday - Friday, 7:00 AM - 3:30 PM EST.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Ruthkosky can be reached on (571) 272-1291. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Ruthkosky/  
Supervisory Patent Examiner, Art Unit 1785

/DJJ/  
Examiner, Art Unit 1785